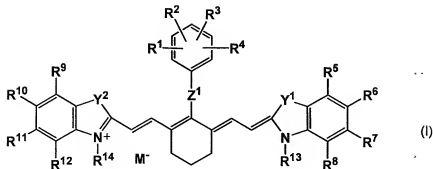


What is claimed is:

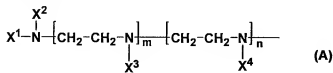
[1] A compound represented by the following general formula (I):

[Formula 1]



[wherein R<sup>1</sup> and R<sup>2</sup> independently represent hydrogen atom, or a group represented by the following formula (A):

[Formula 2]



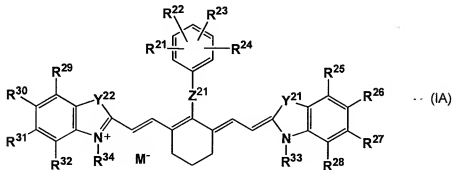
(wherein X<sup>1</sup>, X<sup>2</sup>, X<sup>3</sup>, and X<sup>4</sup> independently represent hydrogen atom, an alkyl group which may have a substituent, or a protective group for amino group, and m and n independently represent 0 or 1), provided that R<sup>1</sup> and R<sup>2</sup> do not simultaneously represent hydrogen atom; R<sup>3</sup> and R<sup>4</sup> independently represent hydrogen atom, a C<sub>1-6</sub> alkyl group which may have a substituent, or a C<sub>1-6</sub> alkoxy group which may have a substituent; R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, and R<sup>12</sup> independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C<sub>1-6</sub> alkyl group which may have a substituent; R<sup>13</sup> and R<sup>14</sup> independently represent a C<sub>1-18</sub> alkyl group which may have a substituent; Z<sup>1</sup> represents oxygen atom, sulfur atom, or -N(R<sup>15</sup>) (wherein R<sup>15</sup> represents hydrogen atom, or a C<sub>1-6</sub> alkyl group which may have a substituent); Y<sup>1</sup> and Y<sup>2</sup> independently represent -C(=O)-, -C(=S)-, or -C(R<sup>16</sup>)(R<sup>17</sup>) (wherein R<sup>16</sup> and R<sup>17</sup> independently represent a C<sub>1-6</sub> alkyl group which may have a substituent); and M<sup>-</sup> represents a counter ion in a number required for neutralizing the charge].

[2] A fluorescent probe containing the compound represented by the general formula (I) according to claim 1 (except for a compound wherein any one or more of X<sup>1</sup>, X<sup>2</sup>, X<sup>3</sup>,

and X<sup>4</sup> represent a protective group for amino group).

[3] A compound represented by the following general formula (IA):

[Formula 3]



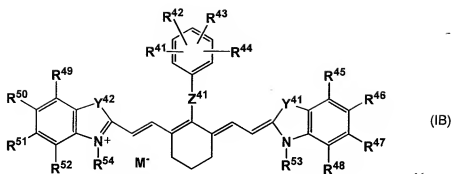
[wherein R<sup>21</sup> and R<sup>22</sup> represent amino groups substituting at adjacent positions on the benzene ring, and one of the amino groups may have one alkyl group which may have a substituent; R<sup>23</sup> and R<sup>24</sup> independently represent hydrogen atom, a C<sub>1-6</sub> alkyl group which may have a substituent, or a C<sub>1-6</sub> alkoxy group which may have a substituent; R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, R<sup>29</sup>, R<sup>30</sup>, R<sup>31</sup>, and R<sup>32</sup> independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C<sub>1-6</sub> alkyl group which may have a substituent; R<sup>33</sup> and R<sup>34</sup> independently represent a C<sub>1-18</sub> alkyl group which may have a substituent; Z<sup>21</sup> represents oxygen atom, sulfur atom, or -N(R<sup>35</sup>)- (wherein R<sup>35</sup> represents hydrogen atom, or a C<sub>1-6</sub> alkyl group which may have a substituent); Y<sup>21</sup> and Y<sup>22</sup> independently represent -C(=O)-, -C(=S)-, or -C(R<sup>36</sup>)(R<sup>37</sup>)- (wherein R<sup>36</sup> and R<sup>37</sup> independently represent a C<sub>1-6</sub> alkyl group which may have a substituent); and M<sup>-</sup> represents a counter ion in a number required for neutralizing the charge].

[4] The compound according to claim 3, wherein R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, R<sup>29</sup>, R<sup>30</sup>, R<sup>31</sup>, and R<sup>32</sup> are hydrogen atoms, R<sup>33</sup> and R<sup>34</sup> are C<sub>1-6</sub> alkyl groups substituted with sulfo group, Z<sup>21</sup> is oxygen atom, and Y<sup>21</sup> and Y<sup>22</sup> are -C(CH<sub>3</sub>)<sub>2</sub>-.

[5] A reagent for measurement of nitrogen monoxide, which contains the compound represented by the general formula (IA) according to claim 3.

[6] A compound represented by the following general formula (IB):

[Formula 4]



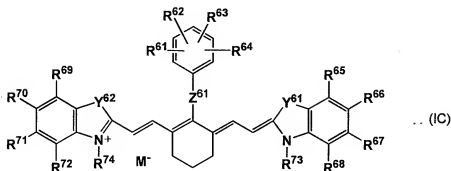
[wherein  $R^{41}$  and  $R^{42}$  combine together to represent a group represented by  $\cdot N=N\cdot$   $NR^{58}$  which forms a ring at the adjacent positions on the benzene ring (wherein  $R^{58}$  represents hydrogen atom, or a  $C_{1-6}$  alkyl group which may have a substituent), or  $R^{41}$  and  $R^{42}$  represent a combination of an amino group (which may have a  $C_{1-6}$  alkyl group which may have a substituent, or a protective group for amino group) and nitro group substituting at adjacent positions on the benzene ring;  $R^{43}$  and  $R^{44}$  independently represent hydrogen atom, a  $C_{1-6}$  alkyl group which may have a substituent, or a  $C_{1-6}$  alkoxy group which may have a substituent;  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ , and  $R^{52}$  independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a  $C_{1-6}$  alkyl group which may have a substituent;  $R^{53}$  and  $R^{54}$  independently represent a  $C_{1-18}$  alkyl group which may have a substituent;  $Z^{41}$  represents oxygen atom, sulfur atom, or  $\cdot N(R^{55})\cdot$  (wherein  $R^{55}$  represents hydrogen atom, or a  $C_{1-6}$  alkyl group which may have a substituent);  $Y^{41}$  and  $Y^{42}$  independently represent  $\cdot C(=O)\cdot$ ,  $\cdot C(=S)\cdot$ , or  $\cdot C(R^{56})(R^{57})\cdot$  (wherein  $R^{56}$  and  $R^{57}$  independently represent a  $C_{1-6}$  alkyl group which may have a substituent); and  $M^+$  represents a counter ion in a number required for neutralizing the charge].

[7] The compound according to claim 6, wherein  $R^{43}$ ,  $R^{44}$ ,  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ , and  $R^{52}$  are hydrogen atoms,  $R^{53}$  and  $R^{54}$  are  $C_{1-6}$  alkyl groups substituted with sulfo group,  $Z^{41}$  is oxygen atom, and  $Y^{41}$  and  $Y^{42}$  are  $\cdot C(CH_3)_2\cdot$ .

[8] A method for measuring nitrogen monoxide, which comprises (a) the step of reacting the compound represented by the general formula (IA) according to claim 3 with nitrogen monoxide; and (b) the step of detecting the compound of the general formula (IB) according to claim 6 [wherein  $R^{41}$  and  $R^{42}$  combine together to represent a group represented by  $\cdot N=N\cdot NR^{58}$  which forms a ring at the adjacent positions on the benzene ring (wherein  $R^{58}$  represents hydrogen atom, or a  $C_{1-6}$  alkyl group which may have a substituent)] produced in the step (a).

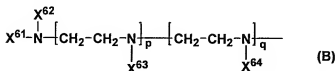
[9] A compound represented by the following general formula (IC):

[Formula 5]



[wherein R<sup>61</sup> and R<sup>62</sup> independently represent hydrogen atom, or a group represented by the following formula (B):

[Formula 6]



(wherein X<sup>61</sup>, X<sup>62</sup>, X<sup>63</sup>, and X<sup>64</sup> independently represent hydrogen atom, an alkyl group which may have a substituent, or a protective group for amino group, and p and q independently represent 0 or 1), provided that R<sup>61</sup> and R<sup>62</sup> do not simultaneously represent hydrogen atom, and when R<sup>61</sup> and R<sup>62</sup> simultaneously represent a group represented by the formula (B), in at least one of the groups represented by the formula (B), either p or q, or both represent 1; R<sup>63</sup> and R<sup>64</sup> independently represent hydrogen atom, a C<sub>1-6</sub> alkyl group which may have a substituent, or a C<sub>1-6</sub> alkoxy group which may have a substituent; R<sup>65</sup>, R<sup>66</sup>, R<sup>67</sup>, R<sup>68</sup>, R<sup>69</sup>, R<sup>70</sup>, R<sup>71</sup>, and R<sup>72</sup> independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C<sub>1-6</sub> alkyl group which may have a substituent; R<sup>73</sup> and R<sup>74</sup> independently represent a C<sub>1-18</sub> alkyl group which may have a substituent; Z<sup>61</sup> represents oxygen atom, sulfur atom, or ·N(R<sup>75</sup>)· (wherein R<sup>75</sup> represents hydrogen atom, or a C<sub>1-6</sub> alkyl group which may have a substituent); Y<sup>61</sup> and Y<sup>62</sup> independently represent ·C(=O)·, ·C(=S)·, or ·C(R<sup>76</sup>)(R<sup>77</sup>)· (wherein R<sup>76</sup> and R<sup>77</sup> independently represent a C<sub>1-6</sub> alkyl group which may have a substituent); and M<sup>-</sup> represents a counter ion in a number required for neutralizing the charge].

[10] A fluorescent probe for zinc containing the compound represented by the general

formula (IC) according to claim 9 (except for a compound wherein any one or more of  $X^{61}$ ,  $X^{62}$ ,  $X^{63}$ , and  $X^{64}$  are protective group for amino group).

[11] A zinc complex formed from the compound represented by the general formula (IC) according to claim 9 (except for a compound wherein any one or more of  $X^{61}$ ,  $X^{62}$ ,  $X^{63}$ , and  $X^{64}$  are protective group for amino group), and a zinc ion.

[12] A method for measuring zinc ions, which comprises (a) the step of reacting the compound represented by the aforementioned general formula (IC) according to claim 9 (except for a compound wherein any one or more of  $X^{61}$ ,  $X^{62}$ ,  $X^{63}$ , and  $X^{64}$  are protective group for amino group) with a zinc ion, and (b) the step of measuring fluorescence intensity of a zinc complex produced in the step (a).